ABSTRACT

ROTOR RECENTERING AFTER DECOUPLING

The invention relates to a recentering device for a 5 rotor shaft (1) for recentering a rotor shaft relative to the axis X of a stator structure (3) in the event of decoupling caused by excessive imbalance, said shaft, in normal operating conditions, lying on the axis X and being radially supported by a bearing support (5) that is 10 disposed in a bore of axis X in said stator structure (3), said bearing support (5) having an outside diameter that is smaller than the diameter of said bore, in order to enable said bearing support to orbit about the axis X in the event of decoupling, said bearing support (5) 15 being connected to the stator structure (3) by radially fusible elements (6), said device comprising means for recentering the bearing support after decoupling, said recentering device being characterized by the fact that the recentering means for recentering the bearing support (5) comprise means (10) for generating a movement in 20 precession P of said bearing support (5) in the direction opposite to the direction of its orbits after decoupling, and a plurality of devices (20) for decreasing the clearance available to said bearing support (5) relative 25 to the axis X, said devices for decreasing clearance being regularly distributed around the axes (X, 11) of the two parts constituted by the stator structure (3) and the bearing support (5), and each part includes a first ramp (21) that is provided on one of said two parts and a 30 protuberance (22) provided on the other of said two parts, said protuberance (22) being, in normal operating conditions, radially spaced apart from said first ramp (21) and capable of coming into contact with said first ramp during the movement in precession P of said bearing 35 support (5).